Name: _____ Date: _____ Class: _____

# Introduction to Variables and Graphs

1. Given the graph below, answer the following questions:

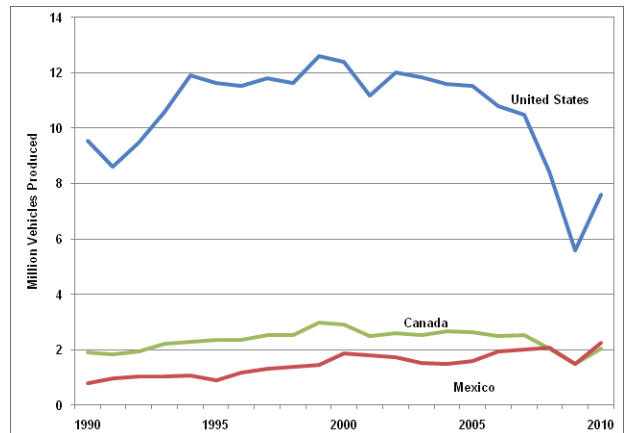### Speed of a Car vs. Time
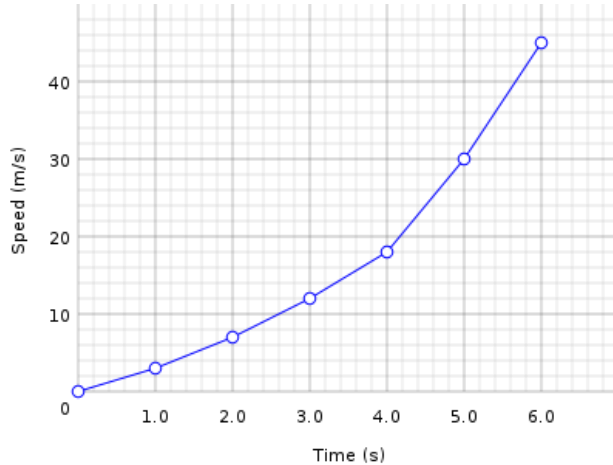
a. What is the independent variable for this graph?

b. What is the dependent variable for this graph?

c. After 2.5 seconds, how fast is the car traveling?

d. How long does it take the car to reach a speed of 34 m/s?

e. Based on this graph, what is the overall trend in terms of speed as time increases?

2. Given the graph below, answer the following questions:

### North American Vehicle Production by Country, 1990-2010

a. What is the independent variable for this graph?

b. What is the dependent variable for this graph?

f. Write a two-sentence explanation for what the graph is attempting to describe.

g. Approximately how many vehicles were produced in Canada in 1999?

h. Based on the years provided in the graph, when was the biggest decrease in the number of vehicles produced? Was this the case in all countries shown?

c. Write a two-sentence explanation for what the trend of the line is showing, given the two variables.

3. The graph below shows the relationships between the heights of individuals (in centimeters) and their respective weights (in kilograms). Data points are shown by "X" and the blue line represents a linear fit for the data.

d. Provide at least three data points on the graph.
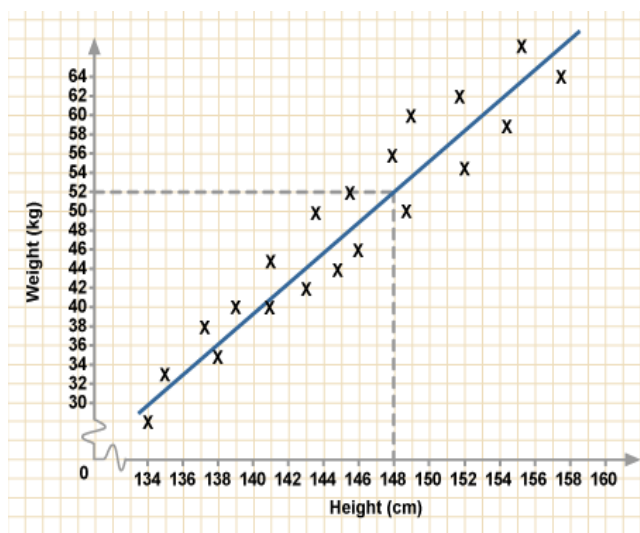


e. Do you think that the blue line appropriately describes the relationship between the two variables? Explain.

a. What is the independent variable for this graph?

b. What is the dependent variable for this graph?